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Original Articles.

URINARY ANALYSIS.*

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There is no secretion or excretion, no tangible state or condition of the body which so accurately shows the daily variations in waste and nutrition as the urine. Accepting this fact, the importance of frequent examinations of the urine can scarcely be overestimated, and we must class its careful study in clinical medicine as an absolute essential to correct diagnosis and rational therapeutics.

Fortunately, the rapid strides made in physiological chemistry, and the more general use of the microscope, afford us means for determining the composition of the urine with great accuracy and a minimum amount of labor.

No greater mistake can be made than to assume that the condition of the urine is an index to the state of the kidneys alone. Disorders of the brain, the liver, the heart, the stomach, alike tell their tale in altered conditions of the urine. Indeed, it would not be going too far to say that no considerable departure from the normal could exist for any length of time in the human organism without such change being recorded by either a pathological condition of the urine or a decided variation from its normal physiological state.

*Read before the Medical Association of Georgia, April, 1895.

It is, however, my intention to discuss only the most reliable and simple methods of detecting such changes, and to point out a few of the sources of error present in some of the methods in common use.

There are in making an examination of the urine four points *usually* determined, viz.: reaction, specific gravity, and the presence or absence of albumin and sugar. To these should always be added a knowledge of the amount passed in twenty-four hours, and the quantity of urea present, and where there is reason to suspect disease, or where the chemical analysis indicates it, the microscope should always complete the work.

The *reaction* can be readily determined by means of litmus paper, the only point worthy of consideration being, in the event of an alkaline reaction, to know whether this represents the state of the blood, or whether it is due to fermentative changes, by means of which the urea has been converted into ammonium carbonate. Should this be the cause of an alkaline reaction, the litmus paper will regain its red color upon drying and warming. This knowledge is valuable for the reason that the presence of a *volatile* alkali in freshly voided urine is almost invariably associated with a diseased condition of the bladder.

Grave pathological conditions are often indicated by considerable variation from the normal of specific gravity. The urinometers in common use I have found to be exceedingly unreliable, different instruments giving, with the same specimen, variations ranging from two to six points. This fact, together with the error arising from variations in temperature, and the fact that the specimen examined may not represent an average of the twenty-four hours, makes the specific gravity as often obtained of but little diagnostic value.

The chemical tests generally made of the urine are a reproach alike to the chemist and the physician. What is to be desired are tests which are reliable under all ordinary conditions, which can be made without the consumption of too much time, and which require a minimum amount of skill for their proper performance. It behooves the profession to find such methods, and having found them to adopt them to the exclusion of all less reliable and uncertain means. It shall be

my aim not to discuss the many useless and tedious processes advocated from time to time, but to give the results of my experience with a view to eliciting from those present such criticism and additional information as they may deem profitable.

For the detection of albumin no less than twenty or thirty distinct tests have from time to time been warmly advocated. For many of these extreme delicacy has been claimed; for some justly so, but frequently at the expense of reliable and trustworthy results. What is to be desired is not increased delicacy, but greater certainty in our methods. It is generally conceded that the presence of a minute quantity of albumin in the urine is of but little diagnostic value, and that upon its existence *alone* renal disease cannot be predicated. The oldest and by far the most commonly used test is the heat and nitric acid test, and yet it is subject to certain sources of error, and among its advocates there is much disagreement as to the best method of applying it. At best, it is liable to give rise to two errors: first, in highly concentrated urines we will often obtain a precipitate of urates upon the addition of either nitric or acetic acids. This is due to the fact that the normal urates present in the urine are converted by the acid into acid urates, which, being more or less insoluble, are precipitated out as a diffuse cloudiness. Take any urine with a specific gravity of 1030, or more, and the acid may give this result. In the next place, mucin is precipitated by nitric acid, and in all cases where there is any considerable amount of mucus, the acid will yield results that are unreliable. Again, if the quantity of albumin be small, and only a few drops of acid added, the albumin may be converted into acid albumin, and no precipitate be obtained. We know that albuminous urine has, as a rule, a low specific gravity, and yet we often see reports of cases where the specific gravity is high and there is reported a trace of albumin. Now, in a highly concentrated urine the mucin is necessarily present in an appreciable quantity, and would, with either nitric or acetic acid, give results which might readily be mistaken for a slight albumin reaction. This can be avoided by first adding to the urine to be tested a solution of sodium chloride or of potassium ferrocyanide, either of which, if mixed with the urine *prior* to the addition of the acid,

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will prevent precipitation of mucin or urates. Personally, I am partial to the ferrocyanide, and have adopted this test for routine work in the office. It has to commend it both simplicity and reliability. It is made by adding to, say, two drachms of urine about a drachm and a half of a solution of potassium ferrocyanide (strength 1 to 20), and then adding ten or fifteen drops of acetic acid, when, if albumin be present, a distinct cloudiness will appear throughout the mixture.

Heller's test with cold nitric acid is preferable to the heat and nitric acid test, but possesses substantially the same objections, though in a less degree.

Where minute traces of albumin are suspected, or where doubt exists after the use of a test, the potassio-mercuric iodide may be used. This test, though subject to error, is exceedingly delicate, and may act as a check in doubtful cases, for where it gives a negative result we may feel sure of the absence of even a minute quantity of albumin. However, so little diagnostic value attaches to slight traces of albumin that extreme delicacy is rarely useful. The absolute amount of albumin present is, from a clinical and diagnostic standpoint, of minor importance, and we believe in a given case that the comparative amounts present from day to day, or week to week, is in the vast majority of cases all that will be required.

I especially desire to call attention to the fact that often much unnecessary confusion is brought about by speaking of the percentage of albumin found in a given specimen of urine. As a matter of fact, the actual *weight percentage* of albumin present in urine never exceeds three to four per cent., and rarely exceeds one per cent., and yet it is common to hear of urines containing from fifty to seventy-five per cent. of albumin, reference being had to the bulk of the precipitate formed, usually with heat and nitric acid. This must necessarily depend much upon the time allowed for settling, and is wholly inaccurate and unscientific.

The methods of detecting sugar in the urine are numerous. Quite a number are based upon the fact that grape sugar in a strongly alkaline solution will, especially when boiled, reduce cupric oxide to cuprous or suboxide; this is the principle involved in Trommer's test and in the use of Fehling's and

Haine's solutions. All things considered, these tests furnish us the best working test available. They are open to the objection that other substances sometimes present in urine will exert a like effect upon the copper salts, and this is especially true in tests requiring the use of a large amount of urine, as in Trommer's test. The use of Fehling's solution has the great disadvantage, that, owing to the presence in it of Rochelle salts, it is unstable, and unless freshly prepared is altogether unreliable. Haine's solution, the formula of which is, thirty grains of pure sulphate of copper dissolved in half an ounce of distilled water, then mixed with half an ounce of pure glycerine and five ounces of liquor potassa added, is stable and keeps indefinitely without change. About one drachm of this solution in a test-tube should be brought to a boil and five to ten drops (never more) of urine added; it should then be again boiled for half a minute when, if sugar be present, a precipitate of the red suboxide of copper is formed. The small quantity of urine used in this test practically does away with the reduction of the copper salts by any other substance than the grape sugar, and, if properly conducted, affords a simple and reliable test.

Boettger's test with bismuth is favored by some, but the salt is blackened by other substances than sugar, notably sulphur, and for this reason, if albumin be present, it must first be removed before adding the bismuth. Moreover, in all highly colored urines, the bismuth is more or less darkened and may give rise to doubt as to the presence of small amounts of sugar. The fermentation test sometimes used, requires too much time and is, moreover, entirely useless when sugar is present in small amounts, inasmuch as the urine will dissolve more or less carbon-dioxide and yield negative results. For detecting small quantities of sugar, the phenyl-hydrazin test is delicate and reliable, and its use applicable in every variety of urine. It requires time and considerable care for its performance, and is not suited to the needs of the busy practitioner.

The determination of urea is a matter much neglected, and yet a knowledge of the amount excreted is oftentimes of much value, and especially so from a prognostic standpoint. In cases of chronic interstitial nephritis, the daily loss of urea is a re-

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liable indication of the manner in which the kidneys are performing their function, and a decided lessening of the amount may enable us to predict uræmic symptoms, which would otherwise have been a surprise. With the aid of the little instrument of Dr. Doremus, the urea may be quickly determined with sufficient accuracy for all practical purposes.

Such other pathological substances present in urine, as pus, blood, etc., can be most quickly and surely detected by means of the microscope.

Before closing I desire to call attention to the centrifugal method of obtaining urinary sediment for microscopic examination. By means of a small electric motor (designed by Dr. C. W. Purdy), carrying two arms with tubes attached, and which can be run by a small battery, the urinary sediment may be obtained in a few minutes, thus avoiding the twelve to twenty-fours delay occasioned by waiting for the sediment to collect in the bottom of the tube, and possesses the additional advantage of yielding a sediment free from and unaffected by the results of fermentation.

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SHOULD DOCTORS WEAR BEARDS?—Dr. F. A. Colby, of Berlin, N. H., in a letter to the *Boston Medical and Surgical Journal*, discusses the danger of the practice. He cites a number of cases in which doctors by wearing beards, have conveyed the infection of diphtheria, etc. The responsibility of the surgeon in this matter is particularly insisted upon. Some time ago the *Medical Record* discussed this subject, advising not necessarily a total abolition of the beard, but restricting it to modest and sanitary limits. At that time, however, we received such severe criticisms from correspondents who had for years worn long and breezy whiskers, that it seemed wise that the subject be dropped. We shall follow with interest the progress of Dr. Colby's propaganda.—*Medical Record.*

THE ENDEMIC FEVER OF THE EASTERN SHORE.*

BY GEO. W. LECATO, M. D., WACHAPREAGUE, ACCOMAC CO., VA.

MR. PRESIDENT AND FELLOWS:—At the request of the chair, I have selected, as the title of this paper, a subject I trust will be none the less interesting because commonplace and familiar—"The Endemic Fever of the Eastern Shore."

Twenty-five years ago, the above title would have suggested the discussion of a disease differing materially in most of its essentials from that to which it now applies; for it is absolutely true, as we all know, that, our present endemic of continued fever has not only quite supplanted the old types of our former periodical endemic, but is doubtless increasing in prevalence year by year. This fact naturally attaches a certain practical importance to its study, and furnishes my excuse for this subject. What I may have to say, however, will be merely cursory, embracing mainly such views as have been drawn from my personal observation, leaving you to take for granted the doctrines of ætiology, pathology, and treatment commonly accpted by the profession.

In the first place, I shall state, as my individual conviction, that all forms of continued fever prevailing on the Eastern Shore are of one origin, and due to a uniform specific poison. In other words, I believe that all the forms of our present endemic may be safely summed up under the title of typhoid fever—a specific disease, varying from time to time in many of its salient features, like other morbid entities, mainly as the result of peculiar local environment, systemic condition and methods of treatment. This idea is admittedly true of most diseases. No one would expect, at the present day, that pneumonia would recover, as a rule, under the profoundly sedative treatment of Kasori or the sanguinary lancet of the phlebotomists of former days. But statistics prove that the success of our fathers, in the treatment of this disease, was quite equal to that of ours. Pneumonia must have changed type in some particular essential; and yet we

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have the sub-crepitant rale, pulmonic consolidation, the rusty sputum, occasional pulmonary œdema, and even purulent infiltration—the whole sum of pathological sequence. According to my observation, we have, in the continued fever of to-day, as a rule, the prodromic malaise; the tendency to epistaxis and other hæmorrhages; marked sensitiveness of the bowel, in spite of constipation; the diurnal cycle of temperature; even rose spots in some cases; occasional perforations of the bowel—in fact, the well-known evidences of a peculiar specific poison, expending its local force in the right iliac region, and in the presence of which our anti-periodic sheet anchor is worse than a delusion. Granted that in private practice we not often are permitted the post-mortem evidences of Peyerian inflammation and ulceration; so complete a picture leaves us little room to doubt that the fever of to-day is the genuine *enteric* of Geo. B. Wood, the *dothinenteritis* of Bretonneau and the *typhoid* of Louis.

True, in an experience of thirty years, I have recognized the disease under varying manifestations. We find at the present day less coma-vigil and muttering delirium, as a rule; we have less trouble to restrain the bowel; cases do not run so rapidly to what is known as the typhoid state; in a word, there appear to be more mild attacks now than formerly. How much of this may be due to a recent modification in the intensity of the poison, and how much to the present vogue of withholding active medication, may be an open question; but my observation has never led me to believe the essential nature of the disease has sufficiently changed to entitle it to a new name.

I am sure I have never recognized a typical case of Dr. Woodward's so-called typho-malarial fever. As a matter of fact, I have not observed the two distinct types that enter into this supposed hybrid, manifesting themselves unmistakably in the same individual at the same time. I think I have never seen the one type run into, or consecutively follow the other. Finally, I have never known any case of so-called typho-malaria to be cut short, or even modified by anti-periodic treatment. Rather, on the contrary, I have been led to suspicion that these two poisons are so specifically distinct as to be in some way, mutually antagonistic. Cer-

tain it is, however explained, that on the Eastern Shore, as elsewhere, the presence of one type, as the endemic, materially qualifies the prevalence of the other. I can recall a period in my earlier practice when continued fever, in Accomac and Northampton, was a comparatively rare disease. The unfortunate reputation the peninsula had earned at that day as a hotbed for malarious poisoning has not yet been lost, though, as we all know, no longer deserved. If we accept the so-called typhoid germ as the ætiological factor in the production of continued fever, and the micro-organism of Laveran as the essential element in paludal poisoning, it would be interesting and instructive to demonstrate the correctness or absurdity of the convictions I have stated; but, so far as I know, these important demonstrations have not been made.

Of the peculiar character of the typhoid fever poison, we have, at present, only a broad field of speculation and the wonderful revelations of the microscope. Unfortunately, it may be said of the fashionable microbe theories, that while they have enlarged our learning, they have not greatly increased our practical wisdom. Does the disease really depend upon a microbe? If so, what are the peculiar conditions of its generation? Where does it mainly inhabit—the food we eat, the water we drink, or the air we breathe? And what peculiar change of local condition will explain how and why the typhoid germ of to-day should have so completely supplanted the miasmatic germ of thirty years ago? These are all practical questions of the greatest importance to us as practitioners—questions for which we are vainly seeking answers, not only from our own observation, but from the scientific investigations of others; for, locked up in these mysteries are hidden the problems of prevention and cure. Medical literature teems with plausible theories; you pay your money and you take your choice. Practically, the solution appears as remote as before. I confess that, individually, I have inclined to many different theories along this line. For instance, I had found typhoid so often among families drinking out of polluted and even filthy wells, I have become a confessed convert to the poisoned water theory. Ultimately, I had a patient who was herself a crank on this very subject. For months

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no single drop of water had been allowed to pass to her stomach that had not previously been boiled. Strange to say, she was the only member of her large family stricken. I can recall a family in which every member was afflicted *seriatim*, who got their water from a driven pump thirty feet under ground, the pump itself, situated on the highest elevation of the premises.

On the Eastern Shore, at least, the water supply derived from underground springs of higher or lower level, evidently has no connection with the prevalence of typhoid, as has appeared in other situations.

Another fact, hard to reconcile with the trend of our accepted theories, is that the poison is not necessarily bred in filth. The lady of the household last referred to, was an uncompromising crank on the extremes of cleanliness. Indeed, on general principles, it may be said that the higher the civilization, the more obnoxious we become to typhoid infection; certainly, the poor and squalid appear to have no peculiar claims of class distinction to the disease. And so, unfortunately, some practical negation always appears to shut us off in the line of any theory we may attempt to pursue. For the present, to be candid, I confess I am entertaining no very settled notions respecting the ætiology of typhoid fever. I am inclined to think we know as little of practical value on this subject as did our fathers. They hinted darkly, in their day, at certain poisonous "humors" manufactured in the great laboratory of nature, under laws of chemical affinity beyond their chemistry. In the later wisdom of our day, we call these results ptomaines, without being able to explain the chemical processes involved in their generation. The guess of our fathers was probably a cloak for their ignorance, that fitted as becomingly as the newer cut of a later day, and, doubtless, they wore it as honestly. And I am verily coming to believe, in my own mind, the time is not distant when ptomaine—the old "humor" of our fathers —will play a stronger role in fashionable ætiology than the present, popular, and omnipotent microbe. History repeats itself in many divisions of human research. It may be we are already drifting backwards towards the theory of our fathers, to take new bearings from old landmarks and lay

out new lines of research, not so much in the domain of bacteriology, as in the expanding and limitless field of spontaneous toxicology.

I have never believed for a moment in the contagion of typhoid fever. It may be infectious in certain ways not well understood. Its specific poison is doubtless localized, and those obnoxious to it, exposed to like conditions, experience like results. I think I have never discovered stronger evidences of the contagiousness of this disease than apply with equal force to malarious fevers and even common colds.

I shall not consume a moment with reference to its symptomatology. We all agree that the diagnosis is often difficult and sometimes impossible in the earlier stages; but that the thermometer may be safely trusted to settle the doubt even short of those characteristic features common to its full development. And, in the matter of prognosis, I shall simply say there is no disease known to us of so grave a character, involving so long a course of continued pyrexia, and subject to so many complications and accidents, that so often ends in complete recovery. Still, the maxim of prognosis laid down by the older writers has probably never been improved upon, namely, that while no attack is so desperate as to encourage despair, there is none so mild as to be without danger.

What I may say of the treatment will be in nowise exhaustive—having reference mainly to my own views and practice—not because I wish to appear egotistic, but because I desire to invite discussion, to draw out a comparison of opinions and experiences for my own instruction as well as yours. I have held for many years that the professional world should, long ago, have reared a monument to that philosopher, Pitcairn, who, when asked what he thought of a certain treatise on the cure of fevers, replied, "I do not like fever cures. You may guide a fever; you cannot cure it. What would you think of a pilot who attempted to quell a storm? Either position is equally absurd. In the storm, you steer the ship as well as you can; in a fever, you can only employ patience and judicious measures to meet the difficulties of the case." Perhaps the application of this doctrine, limited to the management of typhoid fever, has not only gone a long way to make the fever of our day a milder disease than formerly,

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but has really involved the explanation of our present success. Until we unravel the mysteries before alluded to, typhoid will probably remain in the class of so-called self-limited diseases. However revolting to our sense of professional pride, we may as well admit there is no weapon known to our science that will strike down the malady at any period in its progress, or materially abridge its duration. Among the painful reminiscences of my earlier professional life, I recall to this day the hesitation with which I accepted this fact. And yet, what serious disease is there in which more may be done to relieve suffering, ward off danger and ultimately lead the exhausted victim to recovery?

I have an abiding faith in the thorough, but careful cleansing of the intestinal canal as a preliminary, early treatment. The bowel is to be the battle-ground, and the ileum to bear the main brunt of the contest. If this is not the avenue through which the poison originally reaches the circulation, it is certainly the outlet of depuration, and consequently, a dangerous seat of auto-infection. Here the long series of morbid processes are to be carried on, whether we incline to the modern theories of microbic multiplication or the older notions of chemical putrefaction and fermentation. But the choice of means to this end is a matter of grave importance. My own experience is that the most unpromising cases falling under our observation are those that have been doctored at home with compound cathartic pills and other irritant purgatives. One of the earliest deaths I have ever seen in the disease, followed two or three doses of croton oil, administered with the avowed purpose of "touching" an innocent and falsely accused liver. In spite of some recent journalistic assertions, I should not dare attempt the use of any purgative irritant to either the mucous or muscular coat of the bowel. I usually give one or two small doses of calomel, following with salines and large enemata to flush the bowel. I am still old-fashioned enough to believe that calomel unloads the portal circulation, that it stimulates glandular excretion, and that bile limits intestinal fermentation.

An imperative necessity is the regulation of the diet. The victim has a long and doubtful struggle to encounter; the vital forces must be provided for. And yet, states of abnor-

mal temperature impair and even suspend the digestive powers. Solid food is rarely digested, and if it passes into the bowel, it must, necessarily, become not only an irritant, but if you please, a culture field for microbes, or a fermenting mass that only add to the tympany, diarrhœa, and consequent pyrexia. Fluids are more easily absorbed and furnish little residual bulk. The practice laid down in some of the English hospitals to give no food during the fever, that will not easily pass through the meshes of a fine sieve is, at least, safe. I encourage the free use of water, plain, medicated, and flavored. I believe in its refrigerant and depurative action.

Is there anything to be done to limit the propagation of microbes, or abate the tendency to putrefactive changes in the bowel and blood? This is a very interesting, practical question, and medical opinion is in nowise agreed upon the answer. A number of years ago, I began to give what we know as carbolized iodine, partly on the theory of its germicidal properties, mainly because of the professional policy that demands in all cases some sort of medication. I shall not tire you with any notes on this subject, but will simply say that without expecting marked results, my experience has confirmed my confidence in the remedy. Recent observation has inclined me to the belief that the phenic acid in this combination is the valuable factor, and I usually leave out the iodine now because it renders the acid less acceptable to the taste. There are few patients who object to small doses of the acid, properly diluted and flavored, and to get its results, it must be regularly and steadily continued day by day, from early morning until late bedtime. I never give medicine or food during the night, except to meet the demands of a pressing indication. While this remedy is evidently not a direct antipyretic, experience proves that after its administration for several days, the temperature falls, as a rule; the diarrhæa moderates, the tympany lessens. Recent studies of the physiological effects of phenol appear to indicate that it is not only an antiseptic, germicide and local anæsthetic, but a vaso-motor excitant; Bert and Jolyet claiming that it acts like strychnia on the excitability of the medulla. If this be true, it stands on physiological grounds as an ideal remedy in this and

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other low forms of fever due to septic poison. This view accords with my own experience. Dr. Robie Wood, of New York, has lately claimed that it tends to prevent the falling of the hair.

The treatment of high temperatures has been, for the past several years, one of the most interesting questions connected with the management of fever. In private practice, the Brandt method of cold baths is an awkward and bunglesome recourse which may be simply eliminated from present consideration. While I might find a case in which I should be tempted to employ it, I have not yet found such a case. I rarely use any internal medicine for the reduction of temperature. I experimented in my own individual case during an attack of this disease with some doses of the coal tar derivatives, and I shall never attempt this treatment again. My personal conviction is, that under the readings of the thermometer, we are apt, in this day, to grow unnecessarily apprehensive in the matter of temperature, and lose sight of other indications hardly less important. It is undoubtedly true that high temperatures coincide with desperate conditions, but as to which may be the cause and which the effect is always a question of practical interest. For instance, an excessive temperature induced by a mass of fermenting milk-curds in the bowel could not be scientifically and appropriately treated with a cold bath. And it is wise, in all cases of hyperpyrexia, to investigate for any possible condition that may explain the rise of temperature with the hope of being able to apply treatment to the cause rather than the effect.

In spite of the commonly accepted view of damage to the integrity of animal tissues under high temperatures, I believe our apprehensions are in danger of being overexcited. Experiment has demonstrated, time and again, the remarkable resistance of the human body to extremes of heat, even under long exposure. It is a question, then, how far we may be justified in our efforts to reduce temperature that involve either prostration or unnecessary perturbation. I can recall several cases of this disease, making good recoveries, in which the average of minimum temperature did not fall below 105 degrees for eight days; and experience has certainly taught me to look with more anxiety to the pulse for a warning of

peril than to the thermometer. Sponging, either cold, tepid, or warm, over the whole body, and continued, more or less persistently during much of the afternoon and evening, when the maximum range is being reached, has rarely failed, in my practice, to moderate the temperature and promote comfort and sleep. The end is thus attained without unnecessary fatigue, dangerous movement, or even mental shock. In addition, I have sometimes given one or two doses, five grains each, of antikamnia and quinine, during the afternoon and evening, for the purpose of anticipating and prolonging the remission, softening the skin and securing quiet sleep.

When the patient begins to show signs of muscular prostration, and the force of the heart's systole is apparently failing, my main reliance for years has been placed on strychnia given in small doses and often. I feel sure that many a flagging heart may be sustained by this remedy through the trying ordeal of the last weeks of an attack. On the subject of alcohol, I have nothing to add to what you already know, except to say that in late years my doses of whisky are much smaller than they used to be, and that I expect less from it now than formerly.

Of the manifold incidents and accidents presenting themselves in the course of the disease, I have not the time left to speak. A consideration of these would make up really the most interesting and important part of a paper on this subject. It is exactly here that the best judgment of the physician is a most severely taxed and his skill exemplified. It may be said, in a general way, that the doctor who is the most watchful, the quickest to apprehend the peril of complications and the most resourceful in wisely meeting emergencies, will have the best success. But the field is too broad to be entered. I want to call attention, however, to one not very frequent but occasional distressing symptom in the nervous subjects suffering with this disease—more common now than formerly—insomnia. Patients do not always sleep who appear to sleep; are not always properly rested by the apparent sleep they do get, because the sleep is not sufficiently profound. I shall never forget the luxury that a few doses of opium brought to me in the latter stages of this fever. I will add a passing reference to that common and serious event which so often compli-

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cates mild as well as severe cases—hæmorrhage from the bowel—and say I have found large doses of opium the most useful treatment. The exigency is often urgent and pressing; there is no time to waste on astringents. Peristalsis must be profoundly controlled, and the heart's action also. These threatening cases often do well, eventually, but it happens the only case of typhoid fever I have lost during the past four years was a very mild case that died speedily from this complication. I had meant to say something about relapses and recrudescences of fever, so common in typhoid, but this paper has already exceeded its legitimate limits. I can only repeat, it was not designed to be in any way complete or exhaustive; and I submit it merely as a text for this afternoon's discussion, that we may wisely compare views and experiences and, thereby, further fit ourselves to measure up to the serious responsibilities of our profession.

STRYCHNINE IN PREGNANCY. Olenyn (*Protocol of the Medical Society of Tombow* for 1894) has successfully used strychnine in sixteen cases for the correction of weak labor-pains in doses of $\frac{1}{32}$ to $\frac{1}{25}$ grain twice daily, at intervals, during the last six or eight weeks of pregnancy. Four of these cases were anæmic primiparæ from 19 to 32 years of age with weak muscles; three were multiparæ under 30 years, with habitual weak labor-pains; four suffered from chronic metritis and had been pregnant at intervals of from three to twelve years; one patient had a small uterine fibroid; two had flabby uterus and relaxed abdominal walls; one had tertiary syphilis and general debility, and another diseased appendages with hysteria. In two primiparæ the forceps had to be used, and in one the child was dead; but in all the other cases delivery was rapid and regular and the children lived. The third stage lasted from ten to twenty minutes and *post-partum* contraction of the uterus was excellent.—*University Medical Magazine.*

CHLOROFORM.

BY THOS. R. EVANS, M. D., MT. CARBON, W. VA.

Chloroform will be used less often in the future. The hypodermic anæsthesia and the cumbrous apparatus for giving oxygen with chloroform tend to lessen its usefulness and popularity.

These oxygen apparatus are as superfluous as Sir Isaac Newton's method was for the ingress and egress of his cat and kittens—a big hole for the cat and a little hole for the kittens. It is well known that it is safer to administer chloroform out of doors, but this does not necessitate the manufacture of oxygen in the house. The atmosphere indoors and out of doors contains all the oxygen necessary for the proper giving of chloroform. A man who is accustomed to improperly give ether is a most unsafe man to administer chloroform. Without knowing it, he gives ether on the principle that a man can live under water. A patient, said to be etherized by him, has his animation suspended as if by drowning, ether containing the same amount of oxygen as is contained in water. Only the mechanical effects of water are absent. The struggling under ether has been too much attributed to its stimulative effects.

I am more and more impressed with the fact that a cone with a large opening in its apex is the safest mode of administering chloroform anæsthesia. A few days ago a man lost his life from chloroform in this state. He had twice been under chloroform, which would seem to exclude the overrated idiosyncrasy excuse, etc. It is not known what form of apparatus were previously used, but he died under a copper frame with supposable porous material tightly stretched over it, upon which the chloroform was dropped. The old verdict might have been pronounced in this case: Died from want of breath. Doubtless, the cold and heavy anæsthetic had closed the pores in the gauze. The doctors were as careful as the average, and the operation, straightening of a flexed finger, had not been begun.

There should be a chair of physics as well as of physic, in the medical colleges. Atmospheric air is a peculiar mixture. It was thought that Priestley had completed its analysis

over a hundred years ago. Now two men (they are not M. D.'s) join hands over argon.

It is not altogether imagination that during a paroxysm, the asthmatic cannot breathe so well under mosquito netting. Notwithstanding quite thorough ventilation, the same air will stay in the corner of a room for days and days.

I would recommend a method, with hope, for restoring from too profound anæsthesia. It is recommended to take the place of stretching the anus. The introduction of a catheter into the bladder. It is well known that there is a reflex center of respiration in the genitalia. This is shown in certain stages of coition, and is probably independent of the sphincteric reflex. The genitals are the last portions to lose sensibility, and a catheter in the bladder is the nearest possible approach to the seat or basin of the great sympathetic. No harm can be done with a clean catheter, while much harm may be done to the anus under excitement.

Since writing the above I have learned two things: first, that a cone made in the usual way was used in the above case, but that the middle of its apex was pinned, leaving an opening on each side of the pin; second, that either the Esmarch inhaler described above, or German chloroform is a very dangerous thing. For, in Germany, in 1894, according to collective investigation, there was the most appalling number of twenty-three (23) deaths from chloroform narcosis out of 31,843 administrations. Considering the fertility of the Germans in chemical technology, the fault is either in the mode of administration, or possibly in the climate.

Such numerous fatalities would banish its use from southern climates. I think there is no doubt that chloroform is most safely given in the warm months, when the air is most highly oxygenated. The natural pallidness of the German race and its tuberculous diathesis show a lack of oxygen.

DOUBLE OPTIC NEURITIS.

REPORTED TO THE LOUISVILLE CLINICAL SOCIETY

BY J. M. KRIM, M. D., LOUISVILLE, KY.

I present this gentleman, Mr X, age forty-five years, for your examination; his case is interesting as well as unique, as far as my experience goes. I have had him under observation about four weeks. According to the history, I have been able to elicit, ten months ago, while sewing with a sewing machine, he was seized with intense pain in the abdomen. Three-quarters of an hour afterward, a physician saw him and administered remedies which afforded relief, but an hour later the patient became blind and remained so for two or three hours. He gradually regained vision, but it was somewhat blurred, and from that time on, at intervals, he has suffered with intense headache, starting, as he says, in the back part and coming forward to about the center of the cranium. He has been under treatment of various physicians in this city, and in Cincinnati, without any permanent relief; that is, he would be partially free from pain for two or three days; and sometimes, for a few hours, he would be entirely free from headache. For six weeks, he says, he had no pain; it then came on again, and he has not been free from it since. His eyesight was not completely restored, but he could see sufficiently well to follow his work.

About five weeks ago, he suddenly became totally blind and has remained so ever since. His headache is, to some extent, relieved, but it comes on occasionally, lasting for half an hour to an hour, then leaves him again. He has been under treatment with electricity in Cincinnati, galvano-cautery, blistering; he has been given iodide of potassium, etc. Several oculists of this city have examined him, and they all come to the same conclusion—that he has double optic neuritis. As far as I get the family history from the patient, both his parents died from old age. There is no evidence of specific trouble. He has been a moderate drinker and a moderate smoker. His urine was examined four or five different times, the specific gravity being 1018 to 1020; once or twice, a

small quantity of sugar was found, but not enough to give evidence of much kidney trouble. The quantity of urine passed, on an average, is about five pints in twenty-four hours. His appetite is good, and he sleeps fairly well when sufficient relief from pain is obtained. His intellectual powers are not apparently impaired; there has never been any paralysis; he navigates fairly well, but gets tired very quickly.

At the present time he is being given iodide of potassium in rather large doses—one-half ounce every twenty-four hours—and is not suffering nearly as much from the intense headache. The iodide given in the above quantity for three or four days seems to produce œdema of the glottis and difficult respiration, but by omitting several doses, he is all right again.

DISCUSSION.

DR. S. G. DABNEY: I am sorry I did not hear Dr. Krim's description of the case. As far as the ocular condition is concerned, he has inflammation of both optic nerves—double optic neuritis—and a very considerably choked disc, as it is called. It is true that so much importance is not now attached to that condition of the optic nerve, as was formerly the case. It was formerly thought that when the head of the nerve protruded, it was especially indicative of increased intra-cranial pressure, probably a tumor. Although that opinion is no longer held to the same extent, it is still true that marked protrusion of the head of the nerve, in most cases, is due to some disease increasing pressure within the skull. More often than anything else, it is due to brain tumor. Of course, syphilis may produce it, independent of that. This man also had some hæmorrhages into the retina. I did not get much of his history at the time I saw him, on account of his not being able to speak English, and did not make a very thorough examination, but quite enough to be perfectly satisfied as to his condition—double optic neuritis. Inflammation of the optic nerve in brain disease, it was formerly thought, might be produced either by a descending neuritis, in which case the retina is most likely involved with the nerve, or by increased intra-cranial pressure producing well-defined protrusion of the optic disc, the so-called choked disc. Much less

influence is now attributed to this latter mode of causation than formerly.

DR. W. L. RODMAN: Has there been vomiting in this case?

DR. J. M. KRIM: No vomiting at all, not even nausea.

DR. T. C. EVANS: I examined this patient about four weeks ago. At that time he was blind; at least, his vision was reduced to a perception of light. It was rather a difficult case to examine with the ophthalmoscope—on account of the intense photophobia, the eye could hardly be kept open long enough to make an ophthalmoscopical examination. At that time he had a decided optic neuritis in both eyes, with a more or less choked disc and with a considerable protrusion of the head of the nerve, as Dr. Dabney has said; also a few hæmorrhagic spots in the retina. It was impossible for me to get any history of the case, as he understands very little English, and I do not speak German at all; consequently, I could only get what I could see. From the objective symptoms it was plainly a case of double optic neuritis. While he is not paralyzed in anyway, still I noticed then, the same as now, that after sitting quietly for a short time, there is a peculiar sighing respiration; this, I think, is very significant.

In regard to the case of optic neuritis, I believe the idea has been generally abandoned now that it is due to the intracranial pressure. It was formerly thought that this was the cause, from the simple fact that cases have occurred with brain tumor, and the tumor itself was evidence that it was due to intra-cranial pressure. Now it is recognized, I think, by most authorities, as being due to an inter-current affection, but just what produces the inflammation, I do not know.

DR. J. W. IRWIN: What has been the rate of the pulse and temperature.

DR. J. M. KRIM: The temperature is practically normal, pulse rapid.

Dr. J. W. IRWIN: This is certainly a very interesting case, and it is in line with one presented by Dr. Wm. Cheatham, recently, before the society, in which the doctor had diagnosticated brain tumor; and at the same time, the patient manifested very marked symptoms of locomotor ataxia. An investigation was made before the society, and a pronounced ab-

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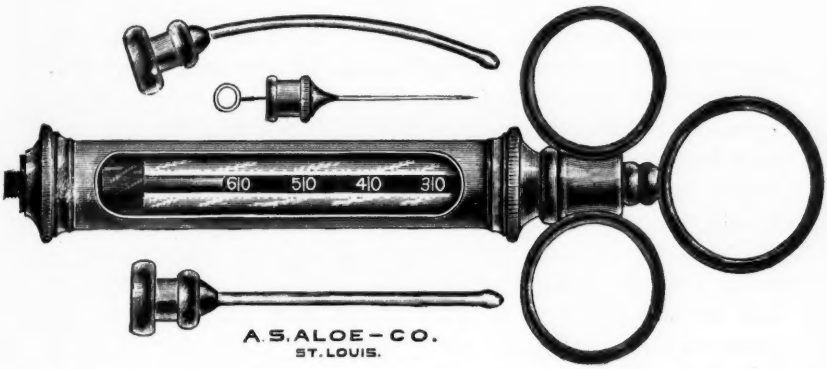
sence of the patella tendon reflex was discovered. Subsequen examination developed the fact that there was no absence of this reflex. The case before us presents much more pronounced evidences of brain tumor than the one shown by Dr. Cheatham. The expression of this man is striking; so also is his walk. In such cases, we are apt to have paroxysmal pain; again, absence of pain. This feature seems to be very marked in the case before us. It is hard to account for the sudden loss of sight in this case, coming on while using a sewing machine; possibly some effusion took place at that time, producing localized pressure, but this view is surmise only. From the history of the case, I am inclined to the belief that there is a small tumor near the base of the brain, pressing on the optic tract at some point far back, not being sufficiently large to produce disturbance of any other part. The trouble may possibly be caused by serious pressure due to chronic meningitis, which would, in a measure, account for the pain. The absence of fever does not prove that meningitis may not be present, but this and the symptoms present go to show that meningitis is not extensive, and, if a factor, it may be limited to the immediate surroundings of the neoplasm.

AN IMPROVED SYRINGE FOR INFILTRATION ANÆSTHESIA.

During the past year, I have been making large use of Schleich's method of producing local anæsthesia by infiltrating tissues with innocuous solutions of salt, morphine, cocaine, etc., the anæsthetic effect resulting from the method of applying the fluid rather than from the drug or drugs employed in it. It has been a source of great satisfaction to me and the patients on whom it was used. The minuteness of strength of drug employed removes every element of danger from that source, even though a large quantity of the solution be injected and the completeness and promptness of the effects are advantages readily evident.



But I have met with one objection that has restricted the use of the method to a marked degree. It is the fact that, no matter how easily and satisfactorily it may be employed in the superficial structures, where there are large vessels in danger of being punctured with the hypodermic needle when one is injecting in the depths of a wound in the neighborhood of large arteries or veins, as in enucleating bubo-glands immediately above the femoral vessels, etc., the likelihood of running the needle into one of them and producing disastrous results is not a fancied one.

By means of the needles represented in the cut, I have been enabled to do away with this difficulty. They are blunt-pointed and made of German silver, so that, though of

sufficient stiffness to be thrust into the connective tissues of a wound after the skin has been severed, they would not injure a blood vessel if pushed against one.

The anæsthesia is begun, therefore, with the sharp steel needle and continued with either of the two silver ones. The choice between the latter depends on whether a curved or straight needle is more conveniently used.

The advantages offered by this improvement have shown themselves to be eminently practical and serviceable, and, in my estimation, will advance the scope and usefulness of the method to a great degree. This instrument was made for me by the A. S. Aloe Co. of St. Louis, Mo.

EXPERIMENTAL STUDY OF PANCREATIC DIABETES.—Chabad has removed the pancreas in animals, and in each case it has produced acute diabetes mellitus. Partial removal only produces symptoms similar to those of diabetes insipidus. The removal of a larger portion causes slight diabetes mellitus, and of the entire pancreas the acute form. He concludes that the pancreatic diabetes thus produced is entirely due to the removal of the pancreas and not to any functional disturbance in other organs. The blood loses its alkilinity in this diabetes, and as the pancreas supplies alkali to the blood, with its removal the blood ceases to be alkaline. The favorable effect of alkalies in diabetes can thus be explained by these experiments on animals. They have fully established the fact of the existence of pancreatic diabetes.—*Gazz. degli Osp. e Dlin.*

Society Reports.

CLINICAL SOCIETY OF MARYLAND.

BALTIMORE, December 20, 1896.

The 315th regular meeting of the Clinical Society of Maryland was called to order by the president, Dr. J. M. Hundley.

DR. L. MCLANE TIFFANY read a paper on

GUNSHOT WOUNDS OF THE PERITONEAL CAVITY AND CONTAINED VISCERA.

DISCUSSION.

DR. RANDOLPH WINSLOW: I am on the card to open this discussion, and will simply report the cases I have seen in the University of Maryland since 1888. During the last three years of my service there, we have had four cases of gunshot wounds of the abdomen. Three were operated upon by me and one by Dr. Spruill. The first case upon which I operated has been previously reported to this society, and is as follows:

CASE I.—Man, age 60. On the 21st of December, 1893, about 6:30 P. M., while stealing coal, was shot by a watchman and received a number of wounds of the small intestine. He was brought to the hospital about 1:30 A. M. the next day, and I saw him at noon. There was no evidence of shock, and his condition was pretty good. There was a small, blackened area about the external wound, which was situated in the right flank. His temperature was 101; pulse, 104. He was anæsthetized, properly prepared for operation and on exploration, the wound was found to lead into the peritoneal cavity. The abdomen was opened and flushed out with hot water. Four wounds were found in the bowel and some fæcal matter in the peritoneum. The intestines were washed, sewed up, and put back, and the abdominal wound packed with gauze, because, owing to the free oozing, it was thought

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best not to close it. The bullet could be felt under the skin, near the crest of the illium, having passed entirely through the bone. The patient was somewhat shocked, but rallied promptly and eventually recovered.

CASE II.—This case occurred last year, while I was in Cumberland, attending the meeting of the State Faculty. The man who had been shot about twenty-four hours previously, was in a septic condition and had general peritonitis when brought into the hospital. Dr. Spruill promptly opened the abdomen and sewed up the wounds which were nine in number, but the patient did not rally, and soon died.

CASE III.—White man, aged 58. On July 4, while crossing a vacant lot, some boys fired a cannon filled with big shot, and the man was hit, though, at the time, he did not feel it. The shot struck him in the left side below the apex of the heart. He walked home and to the hospital. Dr. Spruill examined him and on introducing a probe, found that the bullet had entered the peritoneal cavity. He had vomited some blood clots. An incision was made in the left hypogastric region, and the stomach exposed. The bullet was found to have passed through the wall of the stomach and the wound was closed by a plug of mucous membrane. No extravasation had occurred. The hole was closed by interrupted sutures. After the operation, he vomited blood clots several times. His temperature was 101½; pulse, 88. He developed a bronchitis on the fourth day. The external wound had suppurated, but the peritoneum was not invaded, and the patient got well.

CASE IV.—This was not so fortunate. On the 7th of September, this man was shot, and brought to the hospital within an hour. The bullet had entered the abdominal cavity and besides five wounds of the small intestine, there was a number of the mesentery. Laparotomy was performed, the bleeding vessels ligated, perforations closed, the cavity flushed with sterilized water, and the incision closed. The operation was performed at midnight; the patient was collapsed and in such a condition that it was feared he would die on the table, consequently, as careful a search as was desired, could not be made. The wounds that were formed were supposed to be all that were present, but that proved to

be a mistake. On September 8, the patient was doing well. September 9, some pain in the lower abdomen. September 10, vomited frequently. Gave enema to cause free movement of the bowel and administered strychnia hypodermically. September 11, five movements, upper abdomen distended, and vomited frequently. September 12, seemed better. Had not vomited for twelve hours. Taking milk and lime water and calomel every two hours. Died that night. Autopsy showed a hole in the cæcum. The wounds that were sutured had held firmly. Unfortunately, one hole had been overlooked.

CASE I.—My attention was first called practically to penetrating wounds of the abdomen in July, 1881. On the 4th of July of that year, a colored man was admitted to the University Hospital, with a pistol wound, the ball entering the left side of the abdomen at a point 1½ inches from the linea alba and 3 inches from the umbilicus, making a circular hole with clean-cut edge about the size of the end of the little finger, through which about an inch of omentum protruded. There was no hæmorrhage, and but little pain, the temperature was normal, and the pulse 80, and full and strong. As I could not replace the omentum, it was ligatured and the redundant portion cut off. The wound was slightly enlarged and a drainage tube introduced. Two ice bladders were applied to the abdomen, and a grain of opium administered every three hours. On the third day, his temperature rose from 99, in the morning, to 101 3-5 in the evening; the pulse from 80 to 126; and the respiration to 32; his abdomen became tympanitic, but there was very little tenderness on pressure. The onset of peritonitis was feared, but the next morning, the temperature dropped to 99 4-5 and the pulse to 104; and subsequently no alarming symtoms occurred, and the man was discharged from the hospital in 30 days, entirely well. This case came under my care just previous to the publication of Dr. J. Marion Sim's famous article advocating laparotomy in this class of injuries, and the favorable result is to be attributed to good fortune, rather than to good treatment. It is evident that the ball spent itself in penetrating the abdominal wall and did not wound the intestines.

CASE II.—Pistol wound of epigastrium. June 3, 1894. S. P., negress, was shot with a large revolver, the bullet enter-

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ing the epigastrium, one and one-half inches from the linea alba, and three inches below the ensiform cartilage. From the situation of the wound, it was thought that the stomach, or large intestine, was injured, but there was no vomiting of blood nor bloody stools. There was some pain, but no elevation of the temperature, and she was let alone. She lived five days and two hours, and died with symptoms suggestive of peritonitis. At the autopsy, no peritonitis was found, nor any wound of the abdominal viscera. Some fluid was found in the peritoneal cavity, and the peritoneum detached, with an enormous blood clot under it. A long slit was found in the aorta below the cœliac axis and a counter opening opposite the third lumbar vertebra. There were thus two large openings in the aorta, and yet she lived five days and two hours.

CASE III.—Pistol wounds of small intestines. Twenty-seven holes in intestines and bladder; death in eighteen hours. C. W., admitted on same day as above, was shot in the hypogastric region, over the pubes, with a large pistol. One wound was in the hypogastrium and a bullet was cut out from the integument one inch distant. Another wound was found upon the buttock, near the anus and a bullet was removed from the skin three inches distant. Was admitted to the hospital during the night. Pulse good and shock not marked. Urine bloody. When seen by me the next day, was in collapse; pulseless, vomiting, and in great pain. Autopsy: The bullets were found to have pursued nearly parallel courses, one entering in front and lodging under the skin of the buttock; the other entering behind and lodging beneath the skin of the abdomen. The peritoneal cavity was filled with blood, fæces, pepper pods, and cherry-stones; the lower portion of the small intestine, for about six feet was riddled, there being twenty-five holes in the bowel, one in the mesentery, one in the top of the bladder, and one in the base; altogether, twenty-eight wounds was the result of these two bullets.

Laparotomy should nave been performed in both of these cases, though there is scarcely a chance that a favorable result could have been obtained. I only saw the last case when he was in collapse.

CASE IV.—Pistol wound of liver; death in eighteen or twenty hours. D. G., colored, was shot on the same day as the two preceding cases. The wound was on the right side, in the anterior axillary line, about two inches from the nipple in the fifth intercostal space, and the ball ranging downwards, fractured the sixth rib and entered the abdomen between the sixth and seventh ribs. Much bleeding and marked shock followed. Local pain and pain in the right shoulder. There was no escape of bile from the wound. The patient vomited the contents of the stomach, but no blood. A wound of the liver was diagnosticated. The patient never rallied from the shock, and died in the evening of the same day. Autopsy: The bullet was found to have passed through the upper surface of the liver and to be embedded in the substance of the diaphragm.

CASE V.—Pistol wound of back, perforation of the small intestine, death in twenty-nine hours, from peritonitis. W. G., colored, was shot while running away from a policeman, the bullet entering his back one inch to the left of the second lumbar vertebra, and a probe could not be made to follow its track. Seven hours after the injury, the pulse was 82; respiration, 32; temperature, 98.8; and there was no shock. Soon pain about the umbilicus set in, and rigidity of the abdominal muscles, vomiting and a bloody alvine dejection, and there was numbness of the parts supplied by the left anterior crural nerve. The temperature began to rise and in twelve hours reached 100.2; pulse, 90; respiration, 48, and thoracic in character, the abdominal tenderness remaining. A consultation was held in regard to the propriety of performing laparotomy in this case, but the consultant was opposed to it. The patient died of peritonitis in twenty-nine hours. Autopsy: The ball entered the back opposite the second lumbar vertebra, grazed the third lumbar vertebra, then passed into the peritoneal cavity, pierced the small intestine in two places, and finally dropped into the pelvis. Fæces had escaped and an intense general peritonitis was set up. Laparotomy ought to have been performed in this case.

CASE VI.—Gunshot wound, supposed to have penetrated the abdominal cavity. Operation declined. Recovery. Michael Kane, age 45, admitted December 2, 1893. He was shot a

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short time before admission, with a pistol, the bullet entering three inches to the left of the sternum and one inch below, just over the left costal margin. Dr. Spruill examined him under an anæsthetic and thought that the ball had gone into the peritoneal cavity. After examining the man, I recommended an exploratory laparotomy, which he declined. No serious symptoms supervened and he left the hospital on December 20. The highest temperature was 101, and pulse, 80.

After a consideration of these cases, I agree with Dr. Tiffany that a person who comes in contact with a case of penetrating wound of the abdomen has not done his duty if he fails to give the patient an opportunity for life by performing section. A certain number of cases will recover without operation, but such treatment is simply working in the dark, and in those cases, it is probable that the viscera have not been injured. If they have been injured, it is almost inevitable that death will follow. No surgical rule is better established than that such wounds should be treated by an exploring section, and if necessary by the sewing up of the wounds and ligation of vessels that have been ruptured. There are many points in regard to the technique of such operations which I will not now take up your time in considering, but I wish again to express my opinion in thorough conformity with what has been said, that a surgeon is not justified in permitting a patient to go without laparotomy who has received a penetrating wound of the abdomen. There is but one thing to do in these cases and that is to perform laparotomy and be further guided by the circumstances of the case.

DR. J. W. CHAMBERS: I have been very much interested in the relation of these cases, and think the position taken is the proper one; that every case of penetratng wound of the abdomen demands a laparotomy. One important point in the consideration of these cases is, that no one can draw any deduction whatever from the amount of shock present. There is no relation between the shock and the injury. I have seen recently a man with perforating wound, walking into the hospital with but slight assistance. Another strong point in favor of the operation is, that you do not know anything about what has been injured until you open the abdomen. While there is a rule ordinarily accepted that a bullet

entering this cavity and traveling from side to side makes many wounds, while one from before back will make but few, it cannot be relied upon at all, as is shown in one of the cases related by Dr. Winslow. Only occasionally does a patient recover without operative interference and the operation should be done early. It will be a long time before we can draw conclusions from the cases reported as they vary so in character. Within the last six months, I have operated upon three cases, and all recovered; but, previously to that, I had operated upon four, and all died. All of my last three cases were operated upon immediately after the injury, while the others were not seen early enough.

DR. B. B. BROWN: Some of us remember the paper read by Dr. J. Marion Sims. He was the first to advise laparotomy in these cases, and I was especially impressed by Dr. Tiffany's resume, which varies but little from the rules laid down by Sims, I think in 1881, some fourteen years ago. This mode of treatment was at first severely criticised; now, however, the best surgeons recognize it as perfectly correct, and it shows one more important truth brought forth by that great man.

DR. H. H. BIEDLER: I have had some little experience in these cases, and recently have had several unfortunate ones. In one, a colored boy, who had been shot by one of his companions, an extensive laparotomy was performed, the abdomen being opened, and the incision, which commenced at the sternum, ended at the pubes. Only one wound was discovered in the viscera and that was closed, the bullet not found. The boy died, and at the autopsy the bullet was found beneath the right nipple. The question arises whether laparotomy had not more do with the determination of that life than had the injury. I have seen a large number of cases where this operation was done and followed by decided benefit. Another case I saw, was that of a man brought into the Baltimore University with a gunshot injury, which I took to be a penetrating wound of the abdominal cavity. He presented evidences of shock, and, by the way, I am not inclined to agree with what has been said to the effect that shock does not play any part in the estimation of what shall be done with the case, but, on the other hand, am inclined to

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think that if the viscera are injured, the patient will have a decided amount of shock. This patient died within a very short time, and, at the autopsy, he was found to have a penetrating ulcer of the stomach and a general peritonitis.

I think, as all have said, it is wise to make an exploratory incision wherever you have such injuries to deal with; that has been the tenor of the best surgeons for many years. As to the results, and whether it is best to do it in a given number of cases, no one can tell.

DR. J. M. T. FINNEY: I am sorry I was too late to hear Dr. Tiffany's papers, but his opinions, as I get them from the discussion, are in accord with the best surgeons of the day. Since the day when Dr. ————'s paper appeared in 1887, in which he reviewed the literature of the subject, there has been very little diversity of opinion as to the advisability of this method of treatment. I subscribe to it most heartily.

DR. J. G. JAY: I agree with the practice generally pursued, as stated by those who have spoken before me, and consider it right to follow this line of treatment.

DR. L. MCLANE TIFFANY: The only point I would speak of is the question of shock. In my paper, I quoted Miles in reference to that shock which occurs with the injury. If the shock is progressive, it means internal hæmorrhage. When the patient is first seen he may be profoundly shocked and not be much disturbed, but if he continues to become more shocked it means hæmorrhage, and there is all the more demand for operation. Shock at the time of the injury does not mean hæmorrhage, but later on, it does.

DR. RANDOLPH WINSLOW reported a case of rupture of the liver—laparotomy—death. H. E., white, age 25, admitted to the Maryland University Hospital, on September 30, 1895. Whilst riding on the shaft of a loaded cart, about 8:30 A. M., he attempted to get off, and his foot becoming entangled in the reins, he fell and the wheel passed over his abdomen obliquely, from the right hypochondrium, to the left iliac crest. He was brought into the hospital at once, greatly shocked, with pain in the abdomen, quick and weak pulse, and temperature of 95 degrees. I saw him at eleven A. M. Face blanched; temperature, 96; pulse, fairly good; some pain in the abdomen; some bruises over the right side, but none on the abdomen. There was marked percussion dullness over the lower portion of the belly. A rupture of some of the abdominal viscera, probably the liver, with hæmorrhage;

was diagnosticated, and laparotomy was advised. The operation was performed at 1 P. M. An incision was made in the linea alba from the ensiform cartilage to the pubes, and even before the peritoneum was opened, the dark color of the tissues indicated the presence of blood in the peritoneal cavity which gushed out to the amount of a quart or more, when the peritoneum was incised. The intestines were examined and found to be uninjured but the liver was extensively lacerated on its posterior and inferior aspect in two places. The belly was thoroughly washed out and the lacerations of the liver packed with gauze. The patient stood the operation well and seemed to rally somewhat afterwards, but died on the same night about twelve hours after the operation. At the autopsy, the peritoneal cavity was found to be filled with blood showing that the packing had not prevented hæmorrhage. I consider laparotomy to be urgently demanded in this class of cases, though the outlook for a successful result is very poor.

DISCUSSION.

DR. J. W. CHAMBERS: I would report a case of this character, which occurred to me some six months ago. A young man racing across the street with a friend fell, and it was supposed struck his right side on the curb. His friend thought that he was not seriously injured and did not call for medical assistance. He was carried into a store and was kept all night. He rallied toward morning and was then carried home. When I saw him, his abdomen was distended but no dullness could be made out. An operation was suggested to the family but refused, and he died twenty-one hours after the fall. At the autopsy, it was shown that the liver was practically torn to pieces. It was crushed, and one part was hanging way down, but not absolutely separated. The gall bladder was not ruptured. There was an immense amount of blood in the cavity.

In another similar case, a gentleman was crossing the street ahead of a cab, and it is supposed was struck by the pole though those who saw the accident were not sure that he was struck. I was at the hospital when he came in. He was dead when he arrived. At the autopsy, most of the liver was found in the pelvis. Scarcely half an ounce of fluid in the cavity. His heart was probably stopped when he was struck and he died at once. There was no appearance of injury on the surface, and no hæmorrhage.

DR. S. K. MERRICK exhibited a "Poly-aural Stethoscope" of his own invention and explained its use. It is designed for use in teaching, and will accommodate five students at a time.

The Society then adjourned.

525 North Howard Street. DR. H. O. REIK, *Secretary.*

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Book Reviews.

MOULIN'S TREATISE ON SURGERY.—Edited by John B. Hamilton, M. D., LL. D. Third American edition. Philadelphia: P. Blakiston, Son & Co., 1895.

The favorable reception of the previous editions of this work has induced the American editor to undertake to revise the treatise and to bring it up to date and thus render it more useful to the profession in the United States. New matter has been added and some of the subjects have been rewritten.

The work is particularly full on treatment and the advice given is, in general, practical and trustworthy.

It is somewhat surprising that the author is not inclined to advise electrolysis for the removal of nævi as it is clearly proven that this method yields better results than any other.

The chapter on appendicitis or, rather, typhlitis and perityphlitis is not up to the standard of recent exhaustive articles on the subject which have appeared in the medical press.

Altogether, the work can be recommended as an excellent guide to both students and practitioners.

AMERICAN TEXT-BOOK OF SURGERY FOR PRACTITIONERS AND STUDENTS.—Edited by William W. Keen, M. D., LL. D., and J. William White, M. D., Ph. D. Second edition, carefully revised. Philadelphia: W. B. Saunders, 1895. Royal 8vo: pp. 1,248. Cloth, $7.00; sheep, $8.00; half russia, $9.00. (For sale by publisher by subscription only.)

This book is fully up to the standard of its predecessors in the "American Text-Book" series. Every department of surgery is fully covered and the text explained at every step by illustration. The authors are all selected from special fitness and have succeeded in getting together a work that is unsurpassed of its kind.

All that is obsolete has been cut out. So that, as a text-book, it may be relied upon as presenting nothing that is not in accord with our present knowledge and, hence, safe for the student to learn.

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A HAND-BOOK OF OBSTETRIC NURSING, FOR NURSES, STUDENTS AND MOTHERS. Comprising the course of instruction in obstetric nursing given to the pupils of the Training School for Nurses connected with the Woman's Hospital of Philadelphia. By Anna M. Fullerton, M. D. Fourth revised edition. Illustrated. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St., 1895.

The steady decline in the number of cases of puerperal sepsis, one of the greatest dangers that assails the parturient woman is due entirely to a practical recognition of the "value of cleanliness, antisepsis and eternal vigilance" on the part of the physician and nurse. This little manual is designed specially for the use of the latter, and explains clearly and practically the conditions with which she is likely to be confronted. The importance to the nurse of a thorough understanding of the dangers of the puerperium cannot be overestimated, as it keeps her constantly on the alert and prevents carelessness and inattention to cleanliness. There are added some chapters on the care of the newborn infant and some of the common ailments to which it is subject. The price of the book is $1.00.

PRINCIPLES OF SURGERY. By N. Senn, M. D., Ph. D., LL. D., Professor of Practice of Surgery and Clinical Surgery in Rush Medical College, Chicago; Professor of Surgery in the Chicago Polyclinic; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief to St. Joseph's Hospital; Ex-President American Surgical Association, etc. Second edition; thoroughly revised. Illustrated with 178 wood engravings and five colored plates. Royal octavo; pp. xvi, 656. Extra cloth, $4,50 net; sheep or half russia, $5.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

The merit of Senn's Principles of Surgery is further attested by the necessity from demands on the publisher to issue a new and revised edition. We know of no more valuable work, than this upon the subject, as the author combines the qualities of a profound pathologist with all the technical skill of a practical surgeon of wide experience and much talent. We have no doubt but that the second edition will meet with the ready acceptance which is due it.

XUM

Editorial.

THE HISTORY OF ANÆSTHESIA.

We have received a pamphlet entitled "History of Anæsthesia or Painless Surgery," by Wm. R. Hayden, Bedford Springs, Mass.

The opening lines of the preface set forth the purpose of this brochure: "The following pages were written with an honest and unselfish desire to do justice to one whose inestimable services to humanity were persistently overshadowed by the most extraordinary perversion of facts—a fierce and unmanly attempt to prove that wrong was right and right was wrong."

The "one" referred to is Dr. W. T. G. Morton whose claims to the discovery of painless surgery, Dr. Hayden seeks to verify.

While this is the avowed purpose of the author, yet the claims of Long, Wells, and Jackson, are fully considered.

It is a pity that the history of this discovery, probably the most tremendous in the domain of medicine, should be sullied by misrepresentation, bitter partisanship, sorrow and suicide.

We shall make no attempt to enter into this fifty-year old debate, but will give only the facts in the case of each claimant. On March 30, 1842, Dr. Crawford W. Long, a respectable practitioner of Jefferson, Ga., excised a tumor on the person of one James Venable, under sulphuric ether anæsthesia.

On July 3, 1842, Dr. Long amputated the toe of a negro boy for disease, using ether. On September 9, 1843, he extirpated a tumor from head of Mary Vincent of Jackson, Ga., and on January 8, 1845, he amputated two fingers of a negro boy. The certificates of two witnesses to this operation state that the first finger was removed under the anæsthetic and that the boy experienced no pain; that the second was removed without ether and was very painful. So much for Long's claims

On December 11, 1844, Horace Wells, a Hartford dentist, had a tooth removed under anæsthesia from nitrous oxide gas administered by by G. Q. Calton. Wells' claim rests upon the uncertain support of a decayed tooth. The claim is now as decayed as was the tooth.

The sole pretense of the third claimant, Dr. Jackson, to priority of discovery, is founded upon the alleged claim of having suggested to Morton to use sulphuric ether in place of nitrous oxide gas. It would appear that Jackson's pretenses secured a hearing more through the efforts of rich and influential friends than by reason of their own merits.

On October 16, 1846, Dr. W. T. G. Morton, of Boston, administered ether to a patient at the Massachusetts General Hospital. The patient was about to undergo an operation for removal of a tumor of the neck. The growth was painlessly removed by Dr. J. C. Warren, and the God-given boon of anæsthesia at once became the property of all humanity. The news rapidly ran around the world. Honors and decorations from home and abroad were showered upon Morton. Congress was on the point of voting him a large sum of money. Morton's cupidity was aroused, and he sought to patent ether under the name of "Letheon." At this juncture, Long and Wells and Jackson appeared and pressed their claims with assiduity. The world withheld its judgment, and has not yet rendered the final verdict in favor of any of the contestants.

From the above bare facts, the following conclusions may be legitimately drawn: That the contest lies between Long and Morton; that the claims of Wells and Jackson are insufficiently supported and are almost too gauzy to entitle them to respectful hearing—they have made out no case; that the first to use ether for the relief of the pain of surgical operations was Dr. Long, whose operation in the spring of 1842 was nearly four years before the successful experiment of Morton in October, 1846; and, finally, that Dr. Long is the true discoverer of anæsthesia or painless surgery.

This fact remains as solid as a rock and no amount of opinion or evidence has ever been able to controvert it, or ever shall. That this fact was not universally recognized and acknowledged was Long's own fault. There was, perhaps,

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some extenuation of it. Living in a remote village, removed from communication and opportunities for the exchange of thought with his brother physicians, without which the life of a practitioner of medicine is one of utter stagnation, and inexpert with the pen, Dr. Long probably did not realize to its fullest the magnitude and far-reaching possibilities of his discovery and did not publish it to the world. Had he had the advantages of residence in a city and the opportunity of an impressive public demonstration, or even had he possessed the native endowments of a mind quick to grasp the strong points of a subject, there would have been no altar erected to the "Unknown God," and the claims of others to the discovery, would have never come to vex the mind and confuse the judgment. But Long let the time go by and fell into the monotonous rut of a country doctor. Then came Morton, who had the alertness and shrewdness to see the value of anæsthesia, and forestalled the procrastinating countryman. Had this not occurred and had not Long been sharply aroused from his lethargy by the laudations of Morton, he would have probably continued on in silence, making no announcement, and the uncrystallized knowledge of the great secret would have remained locked in his breast and have died with him.

Morton thus became the involuntary and unconscious mouthpiece of Long, in announcing to the world that which Long had told and shown to friends four years before.

Between Long and Morton is the difference between the discoverer and elaborator.

Of the two, more credit is due Morton. Long hid his light under a bushel; Morton flashed it from the hill-tops.

Die Wahrheit soll die Losung alle Widerspruche sein!

Notes.

DR. C. M. DRAKE, chief surgeon Southern Railway has moved his headquarters from Knoxville to Atlanta.

DR. DUNBAR ROY has been appointed consulting ophthalmologist to the Western Division of the Southern Railway.

DR. C. D. HURT has been appointed physician to the Grady Hospital to fill the vacancy occasioned by the resignation of Dr. J. S. Todd.

DR. S. C. COURTNEY PINKNEY, late of New York, has taken up his residence permanently in Atlanta. Dr. Pinkney will limit his practice to the diseases of the mind and nervous system, with which he has had a large experience in the clinics of New York.

DR. A. H. VAN DYKE, formerly house surgeon of the Hospital for Ruptured and Crippled, New York, has returned to Atlanta and will resume practice, giving especial attention to orthopedic surgery.

DR. A. L. HARRIS, for many years a prominent citizen of Atlanta, died in January. Dr. Harris was but a recent graduate in medicine, having been, all his life, identified with newspaper work.

THE commission appointed to examine into the sanity of Alexander Carr, the assassin of Capt. H. A. King, have reported that Carr is suffering from dementia and is, therefore, irresponsible. Dr. James B. Baird, one of the members of the commission, dissented from the above opinion and gives it as his belief that the prisoner is a simulant, but that there is some ground for reasonable doubt. There is no doubt, however, in the mind of the people, but that Carr was sane at the time the crime was committed, whatever be his mental condition now.

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DR. C. S. WEBB, who was forced to resign the chair of medicine at the Southern Medical College on account of ill health, has returned to his native home in Virginia. Our good wishes and hopes for a speedy restoration to health go with him.

DR. W. S. ARMSTRONG died suddenly while attending a meeting of the Medical Board of the Grady Hospital on February 11. Dr. Armstrong had been in poor health for some time, but a fatal issue was unexpected. The deceased was one of the best known surgeons and teachers in Georgia. He was, for years, professor of Anatomy and Clinical Surgery in the Atlanta Medical College which chair he filled with distinguished ability. He was also attending surgeon to the Grady Hospital. Dr. Armstrong served through the war as surgeon in the Confederate army. He was a clear and forceful teacher and a skillful anatomist. He enjoyed, in a marked degree, the regard and respect of his colleagues in the profession and was beloved of the people for his charity and largeness of heart. He was a surgeon of a high order of ability and large experience.

Dr. Armstrong leaves a widow and two children to mourn his loss, a daughter and a son; the latter a student at the College of Physicians and Surgeons, New York. Resolutions commemorative of the respect and esteem in which he was held have been drawn up by the Medical Board of the Grady Hospital and the faculty and students of the Atlanta Medical College.

THE following, is the report of the committee appointed by the Atlanta Medical Society upon the death of Dr. W. S. Armstrong:

HALL OF THE ATLANTA SOCIETY OF MEDICINE.

Pursuant to the appointment of the president, your committee respectfully submits the following report touching the recent death of our fellow-member, Dr. William Simpson Armstrong:

Dr. Armstrong died suddenly Tuesday evening, February 11, 1896, in the reception room of the Grady Hospital, at which place he had arrived only a few minutes before for the purpose of attending a regular meeting of the Medical Board, to the presidency of which he was recently elected.

Dr. Armstrong was born in Washington, Wilkes county, Georgia, in 1838. After a liberal preliminary education, he commenced the study of medicine under Dr. J. H. Lane, of Washington, and after attending one course of lectures in Augusta, he matriculated in the medical department of the University of New York and graduated from that institution in 1859.

He served with credit to himself as surgeon in the Confederate army from 1861 to 1865. Soon after the close of the war, he went to Europe to further prosecute his medical studies, and upon his return home, he located in Atlanta and commenced the general practice of medicine.

In 1867, he was elected to the Chair of Anatomy in the Atlanta Medical College, after having served one year as demonstrator, and he continued to fill that position with distinguished ability to the day of his death. In 1890, clinical surgery was added to the chair of anatomy.

He was one of the original members of the Surgical Staff of the Grady Hospital, and proved himself, in that capacity, an ardent and invaluable worker.

He was a member and the president of the Board of Health of the city of Atlanta for fourteen years, until he resigned in 1893; and he accomplished extremely valuable results for the sanitary interests of the city, during a very important period of its history and growth.

In the practice of his profession, he exhibited a strong predilection for surgery. His enthusiasm in his work was remarkable and contagious. His earnestness and fidelity were conspicuous and invariable. During the latter years of his life, he performed many of the most intricate and difficult of the major surgical operations, and achieved signal and brilliant results.

His excellence of character, his usefulness, and his uniform kindness and consideration, were universally recognized, and, with all of his admirable traits and all of his professional accomplishments, he was as modest and unassuming as a little child.

His whole life—public, private, religious, and professional—was free from stain. It was marked by faithfulness, honesty and truth and should serve as a shining example to those who desire to meet their obligations to their Maker and their fellow-men.

JAMES B. BAIRD, M. D.,
W. S. KENDRICK, M. D.,
Committee.

Atlanta, February 18, 1896.

XUM

BUSINESS DEPARTMENT.

Address all letters relative to business matters and make all money orders payable to Louis H. Jones, M. D.

If the SOUTHERN MEDICAL RECORD is sent to any one who does not wish it, or beyond the time he intends to pay for it, the editor must be informed directly to stop it. It will not be sent knowingly to any one who does not wish it, but if notice is not given to discontinue, payment will be required for the time it is sent.

ATTENTION.—All communications and all matters pertaining to this department must reach us by the 20th of the month to insure insertion in the following month's issue.

Special Notes.

SANDERS SON'S EUCALYPTON EXTRACT (EUCALYPOL).—Whenever mention is made of Oil of Eucalyptus, we beg you to bear in mind that such reference applies to our preparation, styled for distinction, Eucalypti Extract (Eucalyptol.) To avoid disappointment, we would suggest to specify when prescribing, our manufacture. Samples gratis through Dr. Sanders, Dillon, Iowa. MEYER BROS. DRUG CO.
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AMONG the foods prepared for infants and invalids none has taken a stronger hold upon the medical profession than Imperial Granum. Its method of preparation is peculiar, and it has proven itself practically a good and useful preparation, easily assimilated, and containing a very large amount of nutriment. The numerous certificates from the most eminent physicians received by the proprietors, sufficiently attest the well-deserved popularity of this valuable physicians' aid.—*The American Analyst, New York.*

"COCA" has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain, however. Robinson's Wine Coca we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of cocaine being always determined by careful assay.

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Awarded to Charles Marchand's Glycozone by World's Fair of Chicago, 1893, for its powerful healing properties. This harmless remedy prevents fermentation of food in the stomach and it cures:

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DR. C. MORROSA, 1045 Mission St., San Francisco, California, says: I have used S. H. Kennedy's Extract of Pinus Canadensis (White) in one case of gonorrhœa. A lady had a discharge for months and had been treated with iodine crystals in water as an injection with no effect except to soil her clothing. I gave her a bottle of S. H. Kennedy's White Pinus Canadensis, giving directions for use as injection; internally, gave fluid ext. prunus virg. as a tonic. She lives in Alameda, and only yesterday she sent me some other sufferers, telling them I cured her. I will say in conclusion that your preparations are good. I have used them in some minor cases that I did not think worth while noting at the time, always with success.

EXTRACT from an article on "Rheumatism, its Pathology and Modern Treatment," read before the Lucas County Medical Association, December 14, 1895, by R. H. Timpany, M. D., Toledo, Ohio.—"In summing up the testimony, it is clear to be seen th the at salicylates are a most valuable remedy in acute rheumatism as well as some of the chronic forms. As a matter of fact, the beneficial results obtained is something like 71.8 per cent. In two cases, one of which was acute and the other that might be classified in the sub-acute stage, I received the most gratifying results in the preparation known as tongaline. There seems to be in this preparation just enough of the salicylates to have the desired effect upon the disease proper and yet produce little effect on the circulation. It is a well-known fact that when the salicylates are thrown into the veins, the effect is to increase the energy of the systolic contractions, the number of pulsations and the blood pressure. It seems that under the influence of increasing doses, the vessels dilate, the blood pressure falls, and, finally, the heart is arrested. In the resume of the use of the salicylates, I am led to believe that the heart lesions which follow rheumatism can be traced more pointedly to the toxic doses of the salicylates than the disease itself. But in the preparation, which I have heretofore mentioned combined with its other ingredients, they fail to produce those distressing and disagreeable features which doubtless many of you have encountered."—February Number *American Medical Compend.*

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The ideal safe family laxative, known as "SYRUP OF FIGS," is a product of the California Fig Syrup Co., and derives its laxative principles from senna, made pleasant to the taste, and more acceptable to the stomach, by being combined with pleasant aromatic syrups and the juice of figs. It is recommended by many of the most eminent physicians, and used by millions of families with entire satisfaction. It has gained its great reputation, with the medical profession, by reason of the acknowledged skill and care exercised by the California Fig Syrup Co. in securing the laxative principles of the senna, by methods of its own, and presenting them in the best and most convenient form. The California Fig Syrup Co. has special facilities for commanding the choicest qualities of Alexandria senna, and its chemists devote their entire attention to the manufacture of the one product. The name "SYRUP OF FIGS" means, to the medical profession, the "family laxative, manufactured by the California Fig Syrup Co.," and the name of the Company is a guarantee of the excellence of its product. Informed of the above facts, the careful physician will know how to prevent the dispensing of worthless imitations, when he recommends or prescribes the original and genuine "SYRUP OF FIGS." It is well known to physicians that "SYRUP OF FIGS" is a *simple, safe and reliable* laxative, which does not irritate nor debilitate the organs on which it acts, and, being pleasant to the taste, it is specially adapted to ladies and children, although generally appliable in all cases. Special investigation of the profession invited.

"SYRUP OF FIGS" is never sold in bulk. It is put up in two sizes to retail at fifty cents and one dollar per bottle, and the name "SYRUP OF FIGS" as well as the name of the California Fig Syrup Company, is printed on the wrappers and labels of every bottle.

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J. W. WILLIAMS, M.D., Pickens, S. C., writes: Recently I have had an opportunity to test the merits of Tilden's Firwein in two cases of chronic bronchitis, with results far beyond my expectations in both. One of the cases, that of a female twenty-eight years of age, had a very troublesome leucorrhœa at the time, and to my surprise and pleasure was entirely cured of both ailments at once. Hereafter I will certainly prescribe Firwein in preference to the ordinary remedies in such cases.

ACCURATE ADMINISTRATION OF LITHIA.—Wm. R. Warner & Co.'s original Lithia Water Tablets (three and five grains) admit of an accurate dosage of lithia not to be obtained in any natural lithia water.

These tablets are securely packed so as to maintain their permanency, in consequence of which, when a lithia water tablet is placed in a glass of water, it quickly dissolves, effervescing in so lively a manner as to excite the interest of the patient to such a degree that the unpleasant thought that he is about to take a medicine does not arise. Now that lithia has become a valuable remedy for rheumatism, lithemia, gout, gravel, Bright's disease, etc., these tablets are without doubt the most convenient method to administer it, as enough lithia water tablets may be carried in the pocket to make 2½ gallons lithia water of definite strength.

THE DECADENCE OF OPIUM.—Wendell Reber, A.M., M.D., Pottsville, Pa., oculist and aurist to the Children's Home, under the above caption in the *Buffalo Medical Journal*, writes: "We would not banish opium. Far from it. There are times when it becomes our refuge. But we would restrict it to its proper sphere.

"In the acute stage of most inflammations, and in the closing painful phases of some few chronic disorders, opium in galenic or alkaloidal derivatives, is our grandest remedy—our confidential friend. But here, the application should cease; and it is just here that the synthetic products step in to claim their share in the domain of therapy.

"Among the latter, perhaps none has met with so grateful a reception as antikamnia, and justly so, for among all the con-

STERILITY

JAS. P. PEELER, M, D., Kissimmee City, Fla,, says :

I know of nothing with which I have had better success, in treating the various diseases peculiar to the female, than ALETRIS CORDIAL. I have used it in amenorrhea and dysmenorrhea, with excellent results, and also in ovarian and uterine congestion, whether from cold or otherwise, I know of no better remedy. Mr. L. consulted me about his wife. Had been married four years, and had no children. He was a strong, healthy man, about 28 years of age, and his wife 24. He was very anxious that there should be an increase in the family, and had two other physicians at different times, giving her medicine for that purpose. I ascertained that she suffered very much with her menses, and frequently had to take to her bed during the time. They were sometimes very scant, and at others rather profuse. When consulted it was about a week before her menses should appear. Prescribed:

R. Aletris Cordial ..... 8 ounces.
Sig. One teaspoonful three times a day.

The husband reported that his wife had the easiest time she had ever experienced, and suffered no pain. When the next time came, the menses did not appear; two bottles of ALETRIS CORDIAL were taken, and in regular time they were made happy by the advent of a bright, bouncing girl. The above is one of several cases of the same kind I have had in my practice. I have been prescribing ALETRIS CORDIAL in my practice for about five years, and from its use during that time I have certainly had an opportunity of testing it very well, both singly and combined. When treating females of a weak, nervous and hysterical condition, caused from uterine derangements, the following will relieve in nearly every case:

R. Aletris Cordial ..... 8 ounces.
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tributions of pharmaceutic chemistry, none so fully merits our confidence as this one.

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"Its range of application is wide. It is of positive value in certain forms of dysmenorrhœa; it has served me well in the pleuritic pains of advancing pneumonia, and in the arthralgias of acute rheumatism; on several occasions, I have been able to allay with it the lightning, lancinating pains of locomotor ataxia; but nowhere do I employ it with such confidence as in the neuralgias, limited to the area of distribution of the fifth nerve. Here its action is almost specific; surpassing even the effect of aconite over this nerve."

"Within the last month or two we have used the *Wine of American Ash*, from the well-known firm of Theodore Metcalf Co., quite extensively in menstrual irregularities, such as inflammation, leucorrhœa, etc., with very satisfactory results. The surgical craze in the treatment of diseases of the female pelvic organs has prevented, perhaps, many of our best physicians from studying as carefully as they should, the medical side of the question. Dr. Skene's recent work on 'Medical Gynecology' will, no doubt, do much to bring the pendulum back to a happy medium. Along with the Wine of Ash, especially in the poorly nourished patients, we have used with great benefit, *Burnett's Cod Liver Oil*, one of the best preparations on the market."—*The Denver Medical Times*, May, 1895.

1866 **"H. V. C."** 1895

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Aquæ chloroformi q.s.ad ℥iii.

M. Sig.:—A teaspoonful in water after meals.

FOR DIARRHŒA.

℞. Tinct. Opii. deodorat..3v.
Spirits chloroformi.....3ii.
Acid. sulphuric, dil....℥i.
Vini pepsini.....q.s.℥iv.

M. Sig.:—A teaspoonful in water after each stool.

FOR TAPE-WORM.

℞. Chloroformi.
Ext. aspidii fld.....aa 3i.
Emul. olei ricini..... ℥iii.

M. Sig.:—To be taken in the early morning; no food until thorough action of the bowels.

A GOOD DIURETIC.

℞. Potassii acetat.....3v.
Inf. digital.....℥iii.
Liq. potassii citratis....℥iii.

M. Sig.:—A tablespoonful every four hours in water.

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Medical Jurisprudence.
R. M. KIRBY-SMITH, M. D.,
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For circulars and information, apply to

J. S. CAIN, M. D., Dean of Faculty,

Address until July, Nashville, Tenn.; afterwards Sewanee, Tenn.

Please mention Southern Medical Record.

Cases of anæmia with weak stomach can take the following "iron lemonade" with ease:

℞. Tr. ferri chloridi..... ℥i.
Acid. phosphor., dil... ℥ii.
Syr. limonis..... ℥iss.
Aquæ..... ℥ii.

M. Sig.:—One teaspoonful well diluted.

A GOOD TURPENTINE EMULSION.

℞. Olei terebinth..... ...℥iii.
Olei gaultheriæ .....gtt. vii.
Sacch. albæ.....
Acaciæ, pulv.....aa q. s.
Glycerini..... ℥iv.
Aquæ.....q. s. ℥iii.

M. Sig.:—One to two teaspoonfuls every three hours.

FOR HEADACHE.

℞. Caffein, citrat..... gr.xii.
Phenacetin.....gr. xx.
Sodii bromid..... ℥i.
Ft. Chart. No. 6.

M. Sig.:—One every two or three hours.

FOR DIPHTHERIA.

℞. Hydrogen dioxid.....℥i.
Glycerin.....℥ii.
Aquæ, dist. .....℥ss.

M. Sig.:—Use as a spray or mop.

FOR ACNE.

℞. Sulphur, præcip..... ℥i.
Ung. aquæ rosæ,
Petrolat, moll.....aa ℥iv.

M. Sig.:—Apply night and morning.

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XUM

The Treatment of Influenza or La Grippe.

—:—

It is quite refreshing these days to read of a clearly defined treatment for the grip. But in an article in the *Lancet-Clinic*, December 28th, 1895, Dr. James Hervey Bell, 251 East 32d Street, New York City, says he is convinced that too much medication is both unnecessary and injurious. He has few remedies; prescribes them with confidence; and "trusts the rest to nature."

When called to a case of influenza, the patient is usually seen when the fever is present, as the chill, which occasionally ushers in the disease, has generally passed away. Dr. Bell says he then orders that the bowels be opened freely by some saline draught, as hunyadi water or effervescing citrate of magnesia.

For the high fever, severe headache, pain, and general soreness, the following is ordered:

℞ Antikamnia Tablets (5 gr. each), No. xxx.
Sig. One tablet every two hours.

If the pain is extremely severe, the dose is doubled until relief is obtained. Often this single dose of ten grains of antikamnia is followed with almost complete relief from the suffering. Antikamnia is preferred to the hypodermic use of morphia because it leaves no bad after-effects; and also because it has such marked power to control pain and reduce fever. The author says that unless the attack is a very severe one, the above treatment is sufficient.

After the fever has subsided, the pain, muscular soreness and nervousness generally continue for some time. To relieve these and to meet the indication for a tonic, the following is prescribed:

℞ Antikamnia & Quinine Tablets, No. xxx.
Sig. One tablet three times a day.

This tablet contains two and one-half grains of each of the drugs, and answers every purpose until health is restored.

Occasionally the muscular soreness is the most prominent symptom. In such cases the following combination is preferred to antikamnia alone:

℞ Antikamnia & Salol Tablets, No. xxx.
Sig. One tablet every two hours.

This tablet contains two and one-half grains of each drug.

Then again it occurs that the most prominent symptom is an irritative cough. A useful prescription for this is one-fourth of a grain sulphate codeine and four and three-fourths grains antikamnia. Thus:

℞ Antikamnia & Codeine Tablets, No. xxx.
Sig. One tablet every four hours.

Dr. Bell also says that in antikamnia alone we have a remedy sufficient for the treatment of nearly every case, but occasionally one of its combinations meets special conditions. He always instructs patients to crush tablets before taking.

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